Alexander Zheng

BSc. Computer Science, Year 3

604-767-9356 | [alex\_ander587@hotmail.com](mailto:alex_ander587@hotmail.com) | Github: <https://github.com/alexzheng587>

**Technical Skills**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **LANGUAGES** | | **FRAMEWORKS/TOOLS** | | **OTHER TOOLS** | |
| • | C/C++ | • | Node.JS | • | Git/Github |
| • | Javascript/HTML/CSS | • | OpenGL 3.0 | • | Bash Scripts |
| • | Python | • | JIRA/Bitbucket | • | Jenkins |
| • | Typescript | • | WEBRTC | • | SQLPlus |
| * • | Java | • | Mocha Test Framework | • | Wireshark |

**Work Experience**

**Core OS Software Developer | Blackberry (CO-OP) | Jan 2019 – May 2019**

* Worked on the RTOS QNX kernel, hypervisor, memory management, process management, and OS services
* Migrated a large portion of the code base from using the compiler GCC-6 to GCC-8
* Created a script in C that automatically detects instances of spectre sensitive code
* Implemented and tested changes to memory allocator’s arena data structure for 10% improved performance
* Ensure ISO 26262 safety requirements are met by practicing coding standards and getting test coverage

**Software Developer | Appneta (CO-OP) | Sept – Dec 2018**

* Enhance the system and network configuration software of a Linux based network appliance
* Design and implement customer-facing network level features and the Appneta API using C++ and Python
* Created an automated testing framework for network appliances using Tornado web framework with stats
* Find, debug, and fix low-level system errors in C++ using GDB, including a very high priority bug affecting customers

**Personal Projects**

|  |  |
| --- | --- |
| **Web conferencing web app – Javascript (Personal Project)** | **JAN 2018** |

* Created a web conferencing app for an online tutoring start-up called scholars direct
* Used Node.JS for the backend and WebRTC for video, audio, and text communication

|  |  |
| --- | --- |
| **Course Information Parser – Typescript (Coursework)** | **DEC 2017** |

* Parses university data from API as JSON into relevant data structures and lets users query on it
* Wrote unit and integration white box tests with the Mocha/Chai testing suite

**Extracurriculars/Activities**

* Participated in various coding competitions, such as Microsoft, Lumohacks, and uOttawa Hacks
* Blackberry Student Society member responsible for raising funds and planning events for all co-op students
* UBC Thunderbots member responsible for writing code for soccer-playing robots

**Education**

**MAJOR IN COMPUTER SCIENCE | UBC** **2016 – PRESENT**

* 89.2% Average (4.0 GPA adjusted accordingly)
* Relevant Courses: Software Engineering, Operating Systems, Database Design, Machine Learning